

REMARKS

Claims 1-25, 29-34 and 37 are now pending in the present application. Claims 26-28, 35 and 36 have been canceled, and no claims have been added.

Applicant has carefully studied the outstanding Office Action. The present Response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of this application is respectfully requested. Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejections in view of the following remarks.

Objection to the Drawings

Examiner has again objected to the drawings because Examiner contends that the "elements that actuate the latch 14" are not shown in the drawings submitted with the application. Respectfully, again, Examiner is incorrect. Examiner has also incorrectly stated in the Response to Arguments section that "Applicant misunderstood to which latch the examiner was referring."

Respectfully, the first embodiment of the present invention is depicted in Figures 2 and 3, wherein the latch mechanism is referred to by the numeral 14. The second embodiment is depicted in Figures 4 and 5, which refer to latch mechanisms 62 and 64. Both embodiments are part of the same invention. In paragraph [0074] of the present application, the latch actuating mechanism is depicted "schematically" in Figure 5. Furthermore, in the same paragraph Applicant states that the latch actuating mechanisms of the second embodiment (which is depicted in Figures 4 and 5) "operate in the same manner as for the cat flap of the first embodiment" (which is depicted in Figures 2 and 3). Thus, Applicant has not misunderstood

anything. Applicant did, however, point out how the latch actuating mechanism was already depicted for the second embodiment, which satisfies the requirements under applicable law. All of the features in the claims are shown in the drawings as submitted.

Again, Applicant is not required to show every single element of every embodiment of the invention in every single drawing submitted with the application. All that is required by 37 C.F.R. § 1.83(a) is that the “drawing” must show “every feature of the invention specified in the claims.” Clearly Section 1.83(a) does not require Applicant to show every feature of the invention in every drawing for every embodiment. *Cf. TI Group Auto. Sys. (N. Am.), Inc. v. VDO N. Am., L.L.C.*, 375 F.3d 1126, 1138 (Fed. Cir. 2004) (noting that “the fact that the drawings are limited to a particular embodiment does not similarly limit the scope of the claims.”) Here, the fact that the latching mechanism is fully depicted in the drawings for one embodiment is sufficient under applicable law.

In summary, Applicant has already stated in the application that the latch actuating mechanisms of the second embodiment operate in the same manner as they do in the first embodiment. This effectively incorporates the latch actuating mechanisms depicted in Figure 5 by reference into Figures 2 and 3. All that is required under applicable law is that one embodiment of the claimed invention be shown in the drawings, not every feature of every embodiment of the claimed invention. The latch actuating mechanisms have been sufficiently depicted and described in the application as originally submitted, and Applicant again respectfully requests Examiner to withdraw this objection to the drawings.

Rejection under 35 U.S.C. § 112

Claims 1-13, 34 & 35 are again rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

RESPONSE TO OFFICE ACTION

DATED APRIL 30, 2007

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With respect to claims 1-13, 34 & 35, the Office Action in part states:

The claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Page 12 of the Specification describes how the latch mechanism is to be actuated, but it is still not readily apparent to the Examiner how the latch is intended to be disabled. The drawing show no way of moving the latch. How is the latch to be depressed? Into what aperture or recess is it to move? Where is the biasing element mentioned in the Specification? Where do the actuating arms attach to the latch? How do they retract the latch mechanism? How do they release the latch mechanism?¹

In the Response to Argument section, Examiner has incorrectly suggested that Applicant has misunderstood Examiner's Section 112 rejection. Applicant again points out that the latch mechanism 14 referred to by Examiner is part of the first embodiment of the present invention described in the specification, and depicted in Figures 2 and 3. The second embodiment is described later in the specification, and depicted in Figures 4 and 5. Although they are separate embodiments of the same invention, their latching mechanisms operate in similar ways, as described in paragraph [0074] of the application.

Under binding Federal Circuit precedent, "If an invention pertains to an art where the results are predictable, e.g., mechanical as opposed to chemical arts, a broad claim can be enabled by disclosure of a single embodiment, and is not invalid for lack of enablement simply because it reads on another embodiment of the invention which is inadequately disclosed." *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524 (Fed. Cir. 1987) (internal citations omitted). The latch mechanism Examiner complains of is part of the predictable mechanical arts. Furthermore, the second embodiment of the present invention is clearly enabled by the written

description and Figures 4 and 5. Actuating motors **73** are connected to mechanical arms **69 and 71**, which are connected to the latches **62 and 64**. It is clear from Figure 5 alone that the actuating motors engage and disengage the latches by moving the mechanical arms. Therefore, even assuming *arguendo* that Examiner is correct in the belief that the operation of the latching mechanism of the first embodiment is not adequately disclosed in the application, the written description of the second embodiment of the present invention is clearly sufficient under Federal Circuit precedent to satisfy the enablement requirement of Section 112 because the second embodiment is clearly enabled. This is one independent reason Examiner's Section 112 rejections should be withdrawn.

Regardless of any of the foregoing, the first embodiment is enabled by the patent application as originally submitted. As Applicant stated in response to Examiner's previous office action, Applicant has already pointed to a commercially available product that incorporates a latch mechanism that can be used with Applicant's invention. Specifically, in paragraph [0064] of the application, Applicant has pointed Examiner and one skilled in the art to the Model 500, Model 520 and Model 540 Battery Powered Cat Flaps marketed and sold under the trademark "STAYWELL" by Reilor Limited in Preston, England for an example of an actuating mechanism for the pet door of Applicant's invention. Clearly, providing an example of a commercially available working example of the latch actuating mechanism is sufficient to satisfy the enablement requirement. *Cf. Application of Colianni*, 561 F.2d 220, 222 (C.C.P.A. 1977) (upholding claim rejection and considering the lack of a working example as evidence that claims were not enabled). Pointing one skilled in the art to a working, commercially available example of a claim feature is a commonly used and well understood patent application drafting

technique routinely employed by patent applicants in order to enable their inventions. Here, Applicant has pointed to such a commercial embodiment of the latching mechanism of the present invention, which is more than enough to satisfy the enablement requirement. This is another independent reason Examiner's Section 112 rejections should be withdrawn. Applicant, therefore, again respectfully requests that all of the rejections based on Section 112, first paragraph be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 1-7, 9, 10 and 15

Claims 1-7, 9, 10 and 15 are rejected under 35 U.S.C. 103(a), as being unpatentable over De La Cerda (US 5,992,096) in view of Harris (US 4,893,952).

With respect to claims 1-7, 9, 10 and 15, the Office Action in part states:

De La Cerda discloses a pet door comprising a pivotably mounted flap 8, a latch mechanism (18 and 20) that can bar the flap from moving in both directions, and a control mechanism (12, 22 and 27) for disabling the latch mechanism. The latch mechanism is located between the front and back sides of the flap, so that the latch does not extend out either way. The control mechanism is located above the door flap on one side, as are the electrical components of the control system. The pet wears a key 24 that emits a signal that unlatches the flap.

De La Cerda fails to disclose the control mechanism as being an infrared radiation detector. However, Harris teaches using an infrared radiation detector 10 to determine whether something has approached a door. The infrared radiation detector is located above the door, depends downwardly into an upper edge of the opening, has a conical infrared radiation receiving zone "A" with a beam angle of 60 degrees.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the infrared radiation detector of Harris, because an infrared radiation detector has an interchangeable purpose with a motion detector. It would be further obvious to mount the electrical

components of the control system and the infrared radiation detector to a common circuit board, since both system and detector are located in the same place.²

Examiner has incorrectly suggested in the Response to Arguments section that the claim element “adapted to detect a modulated and encoded infrared radiation signal” is “a recitation of the intended use of the claimed invention” which does not “result in a structural difference between the claimed invention and the prior art.” Respectfully, providing a radiation detector that is adapted to detect a modulated and encoded infrared radiation signal would result in a radiation detector that is structurally and functionally different from the prior art radiation detector disclosed in Harris. In paragraph [0071] of the present application, the operation of the radiation detector adapted to detect a modulated and encoded infrared radiation signal is described thusly: “When the infrared detector 34 detects incoming infrared radiation, the signal is decoded by the control circuitry 22 to determine whether or not the signal matches that preset or previously learnt by the control circuitry 22, and if the signal is the correct signal, the actuator motor 20 is operated to unlatch the latching mechanism.” Conversely, the infrared radiation detector of Harris is a Passive Infrared (PIR) sensor, which comprises “a wafer-like crystal of pyroelectric material which momentarily generates a small voltage when the radiation impinging on the crystal changes approximately 4°F.” (Harris, col. 5, ll. 43-55) The PIR sensor of Harris is, thus, not structurally or functionally equivalent to the infrared detector of Applicant’s invention because the Harris PIR sensor does not decode an incoming coded infrared signal, nor does the Harris PIR sensor compare that decoded signal to a preset signal and operate the door accordingly. Therefore, Applicant respectfully requests that Examiner withdraw the rejections based on De La Cerda in view of Harris because all of the limitations of claim 1 are not provided by the combination.

² Office Action mailed October 11, 2006, page 5.

Examiner also contends that “in light of Harris, it would have been obvious to one of ordinary skill in the art to provide the coded signal of De La Cerda in an infrared format, thus making it a coded infrared signaling system.” However, even providing the coded signal of De La Cerda in infrared format would not arrive at Applicant’s claimed invention. As pointed out previously, once the invention of De La Cerda detects motion from an animal, it sends out a “scanning signal” and receives a “return signal from an encoded pet tag” before it opens the door. Thus, De La Cerda only works when both the pet door and the pet collar contain a transceiver capable of both sending and receiving radio signals. Applicant’s infrared detector, on the other hand, is a receiver, not a transceiver, because claim 1 of the instant application states that it comprises a “downward directed receiving zone for infrared radiation.” Applicant’s invention does not transmit a “scanning signal” and wait for a “return signal” in response to motion in front of the pet door, nor does Applicant’s invention even have the ability or need to detect motion in front of the pet door. Instead, Applicant’s invention continuously checks any infrared radiation which impinges the detector for a particular modulated and encoded infrared signal that is periodically transmitted by a pet collar key. It is clear, therefore, that simply substituting infrared radiation into the teachings of De La Cerda does not arrive at the claimed invention. Applicant again requests that the rejection of claims 1-7, 9, 10 and 15 be withdrawn as they are not obvious in light of the art cited by Examiner.

Additionally, with respect to claim 6, neither De La Cerda nor Harris discloses that the “downwardly directed receiving zone for infrared radiation is conical.” (emphasis added) Because the references cited by Examiner do not teach each and every element of claim 6, Applicant respectfully requests withdrawal of this rejection.

Finally, with respect to claim 15, neither De La Cerda nor Harris discloses that the

infrared radiation detector is “located on the unlatched side of the door flap.” Because the references cited by Examiner do not teach each and every element of claim 15, Applicant respectfully requests withdrawal of this rejection.

Claim 8

Claim 8 is rejected under 35 U.S.C. 103(a), as being unpatentable over De La Cerda (US 5,992,096) in view of Harris (US 4,893,952) and further in view of Kornbrekke (US 4,698,937).

With respect to claim 8, the Office Action in part states:

All of the elements of the instant application are discussed above except that De La Cerda fails to disclose the beam angle. However, Kornbrekke teaches an infrared beam angle of 80 degrees, which is about 90 degrees. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda in view of Harris with the beam angle of Kornbrekke, since the wide angle provides a receiving zone wide enough to interact with any infrared transmission in the area.

Applicant incorporates the arguments with respect to claim 1 above herein as claim 8 ultimately depends from claim 1, which is patentable as discussed above.

Furthermore, Kornbrekke does not disclose a “total beam angle” of about 90° as the term “total beam angle” is used in claim 8. In Kornbrekke, the beam angle is discussed therein is the beam angle of infrared radiation being transmitted in front of the door. See Kornbrekke, col. 5, ll. 22-25. By contrast, the total beam angle of claim 8 of the present application is the total beam angle for the “receiving zone.” In other words, the downwardly directed receiving zone of claim 8 is able to detect, not transmit, infrared radiation impinging the sensor at an angle of about 90°. It is clear, therefore, that combining the teachings of Kornbrekke with Harris and De La Cerda will not arrive at the invention of claim 8. Applicant respectfully requests withdrawal of this rejection in light of the foregoing comments.

Claim 11

Claim 11 is rejected under 35 U.S.C. 103(a), as being unpatentable over De La Cerda (US 5,992,096) in view of Harris (US 4,893,952) and further in view of Miconi (US 5,946,855).

With respect to claim 11, the Office Action in part states:

All of the elements of the instant application are discussed above except that De La Cerda fails to disclose that the control system includes an actuator motor. However, Miconi teaches using an actuator motor 66 to operate a pet door 50. The motor is activated by an infrared sensor 68. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the actuator motor of Miconi, since motors provide a reliable way to operate doors.

Applicant incorporates the arguments in favor of patentability of claim 1 above herein because claim 11 ultimately depends from claim 1, which is patentable as discussed above. Therefore, Applicant again respectfully requests withdrawal of this rejection of claim 11.

Claims 12-14 and 37

Claims 12-14 and 37 are rejected under 35 U.S.C. 103(a), as being unpatentable over De La Cerda (US 5,992,096) in view of Harris (US 4,893,952) and further in view of Engle (U.S. Application 2002/0110373).

With respect to claims 12-14 and 37, the Office Action in part states:

All of the elements of the instant application are discussed above except that De La Cerda fails to disclose an attenuating device for ambient infrared radiation. However, Engle teaches using a filter 35 made of an infrared absorbing material to permit transmission therethrough of only a selected range of wavelengths. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the attenuating device of Engle, since without an attenuating device the pet door might open due to ambient radiation when the pet is not even present, which would leave the door open to other animals or intruders.

Applicant incorporates the arguments in favor of patentability of claim 1 above herein because claims 12-14 ultimately depend from claim 1, which is patentable as discussed above, and because the arguments favoring patentability of claim 1 apply equally as well to claim 37. Therefore, Applicant again respectfully requests withdrawal of the rejections of claims 12-14 and 37.

Furthermore, Applicant maintains that Examiner's purported reason for combining Engle with De La Cerda and Harris is a case of impermissibly reading Applicant's teachings into the prior art. *Panduit Corp. v. Denison Mfg. Co.*, 810 F.2d 1561, 1575 n. 29, 1 U.S.P.Q. 1593, 1602 n.

29 (Fed. Cir. 1987) (citing need to “guard against hindsight and the temptation to read the inventor's teachings into the prior art”). It is again noted that paragraph [0068] of Applicant’s published U.S. application gives the exact justification relied upon by Examiner for combining Engle with De La Cerda and Harris. Additionally, the Engle patent application is related to a field of endeavor wholly separate from Applicant’s field of endeavor. Examiner contends that “the Engle reference is related to the transmission and reception of signals.” However, the “Field of the Invention” listed in the Engle reference, in its broadest sense, “relates to devices that are actuated by a finger actuator.” De La Cerda, by contrast, relates to pet doors, a clearly distinct field of endeavor, even when the references are considered in their broadest sense. Applicant respectfully requests Examiner to reconsider whether there exists any motivation to combine Engle, which is directed to a button for a camera, with the teachings of De La Cerda, which is directed to an automatic pet door. Therefore, Examiner is requested to withdraw the rejection of claims 12-14 and 37.

Claims 16 and 18

Claims 16 and 18 are rejected under 35 U.S.C. 103(a), as being unpatentable over De La Cerda (US 5,992,096) in view of Harris (US 4,893,952) and further in view of Green (U.S. 4,776,133).

With respect to claims 16 and 18, the Office Action in part states:

All of the elements of the instant application are discussed above except that De La Cerda fails to disclose the pet flap being substantially transparent to infrared radiation. However, Green teaches using a clear pet flap 14 in a pet door. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the pet door of De La Cerda with the clear flap of Green, since a substantially transparent flap allows infrared radiation to pass through and be received by an infrared radiation detector.

Applicant incorporates the arguments in favor of patentability of claim 1 above herein because claims 16 and 18 ultimately depend from claim 1, which is patentable as discussed above. Therefore, Applicant again respectfully requests withdrawal of this rejection of claims 16 and 18.

Claim 17

Claim 17 are rejected under 35 U.S.C. 103(a), as being unpatentable over De La Cerda in view of Harris and further in view of Green and Miconi. "All elements of the instant application are discussed above. Harris teaches using infrared radiation, Green teaches using a clear pet flap, and Miconi teaches using a motor to move elements of a pet door."

Applicant incorporates the arguments in favor of patentability of claim 1 above herein because claim 17 ultimately depends from claim 1, which is patentable as discussed above. Therefore, Applicant again respectfully requests withdrawal of this rejection of claim 17.

Claims 19, 20, 22, 23 and 29-33

Claims 19, 20, 22, 23 and 29-33 are rejected under 35 U.S.C. 103(a), as being unpatentable over Deighton in view of De La Cerda.

With respect to claims 19, 20, 22, 23 and 29-33 the Office Action in part states:

Deighton discloses a key 74 that could be adapted to be fitted to a pet collar. The key has a window that is substantially transparent to infrared radiation and contains an infrared radiation transmitter, a control circuit and a battery, as described in column 4 of the specification. The key housing, shown in figure 8, includes a handle with an opening to receive a suspension element therethrough. The key is adapted to be suspended by the handle at an angle, can be adapted to fix a rigid suspension element at a selected angle, and sends out an infrared beam with a beam axis at an angle. The key hangs under its own weight. The control circuit is adapted to cause periodic transmission of a coded infrared signal from the infrared radiation transmitter.

Deighton fails to specify that the key depends downwardly from a

pet collar or the beam angle of the infrared transmission. However, De La Cerda teaches using a key on a pet collar, as shown in Figure 5, and also teaches a beam angle of 60 degrees. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the key of Deighton with the pet collar and beam angle of De La Cerda, since the pet collar is a secure, easy way to attach the key to a pet, and since a 60 degree angle provides a wide transmission area to lessen the chance that the pet will not be standing in the correct location to interact with the infrared receiver. In addition, it is clear from figure 5 of De La Cerda that the key is inclined at an angle of approximately 45 degrees from the horizontal, and implies that the signal is inherently directed out from the end, at approximately that 45 degree angle. At any rate, it would have been obvious to one of ordinary skill in the art at the time of the invention to direct the signal from the end of the key where the window is; this is shown by Deighton.

Respectfully, Examiner wrongly contends that De La Cerda teaches a beam angle of 60 degrees, and that De La Cerda teaches a pet key with a beam axis angled at 45 degrees from horizontal. Examiner's reliance on a rough sketch of a dog's head, neck and collar around its neck is entirely unpersuasive. The lines that make up the collar key depicted in Figure 5 of De La Cerda are not at all straight, and the sketch is certainly not nearly detailed enough to make any kind of determination regarding its beam axis angle with respect to horizontal. Moreover, if the key of Deighton were suspended from the dog collar as depicted in Figure 5 of De La Cerda, it would "hang under its own weight," as Examiner stated in the office action at page 7. When it "hangs under its own weight," it would hang straight down because, in both Deighton and De La Cerda, the key appears to be attached at a point directly in the center of the attached side. By hanging straight down, its beam axis angle with respect to horizontal would be 90 degrees. Because the art cited by Examiner does not teach a beam axis angle with respect to horizontal of between 20° and 60°, claims 19, 20, 22, 23 and 29-33 are not obvious and these rejections should be withdrawn.

With regards to claim 22, De La Cerda does not teach a "beam angle with a total angular

extent of from 30° to 90°.” Again, nothing in Figure 5 of De La Cerda depicts what the total angular extent of the imagined beam angle would be. This is unsurprising because the dog Figure 5 is a simple sketch, and is clearly not detailed enough to provide the type of information Examiner contends it provides. Similarly, with regards to claim 23, De La Cerda does not teach a “beam angle with a total angular extent of about 60°.” Examiner is reading too much into Figure 5 of De La Cerda in an attempt to reject these claims. Therefore, Applicant respectfully requests that Examiner withdraw the rejection of claims 22 and 23.

With regards to claim 29, the cited art does not teach a collar key oriented at an angle of 30° with respect to horizontal, as described previously. Therefore, Applicant respectfully requests that Examiner withdraw this rejection.

With regards to claim 33, Deighton does not teach a control circuit that is “adapted periodically to cause transmission of a coded infrared signal.” Instead, Deighton teaches a control circuit that transmits an infrared signal when a button is pressed. (See Figure 8 of Deighton) Such an intermittent signal cannot be considered periodic. A periodic signal is one that occurs at regular intervals. The signal of Deighton does not occur at regular intervals, and thus is not periodic. Applicant respectfully requests that Examiner withdraw the rejection of claim 33 as Deighton does not teach a control circuit that periodically transmits a coded infrared signal.

Claims 21 and 34

Claims 21 and 34 are rejected under 35 U.S.C. 103(a), as being unpatentable over Deighton in view of De La Cerda and further in view of Harris. “All the elements of the instant application are discussed above.”

Applicant incorporates the arguments in favor of patentability of claim With regards to

claim 19 above because claims 21 and 34 ultimately depend from claim 19. Furthermore, with regards to claim 21, none of the cited references teach a conical transmitting zone. Thus, each and every claim limitation is not found in the art cited by Examiner, and withdrawal of this rejection is appropriate. With regards to claim 34, Applicant also incorporates the arguments in favor of patentability of claim 1 herein, and respectfully requests withdrawal of the rejection of claim 34 as well.

Claims 24 and 25

Claims 24 and 25 are rejected under 35 U.S.C. 103(a), as being unpatentable over Deighton in view De La Cerda and Kornbrekke (US 4,565,029).

With respect to claims 24 and 25, the Office Action in part states:

All of the elements of the instant application are discussed above except that Deighton fails to disclose the beam angle's total angular extent. However, Kornbrekke teaches an angular extent of 20 degrees, which is about 24 degrees. It would be obvious to one of ordinary skill in the art at the time of the invention to provide the key of Deighton with the beam angle of Kornbrekke, since a small angle allows the key to interact with the receiver only when intended to; it keeps the pet door from opening whenever the pet is just walking nearby.

Applicant incorporates the arguments in favor of patentability regarding claim 19 above because claims 24 and 25 ultimately depend from claim 19. Applicant, thus, respectfully requests that Examiner withdraw these rejections.


CONCLUSION

In light of the amendments and the arguments made by Applicants above, Applicants submit that all pending claims are now in condition for allowance. Applicants respectfully request that Examiner withdraw all rejections with regard to the above-referenced claims in reliance on one or more of the grounds submitted by Applicants.

If there are any outstanding issues that the Examiner feels may be resolved by way of a telephone conference, the Examiner is cordially invited to contact James R. Gourley or Colin P. Cahoon at 972-367-2001.

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Respectfully submitted,



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